

Starting/Doing a MSc Thesis & Graduation Procedures

Track Environmental Engineering

River discharge modelling based on surface flow velocity estimations

A combination of Large-Scale Particle Image Velocimetry and three dimensional discharge modelling

S. Schurer

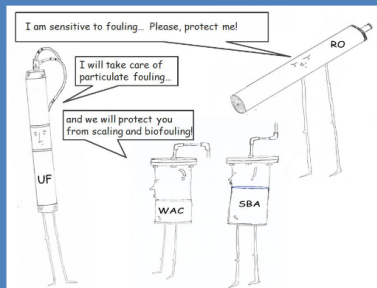


TU Delft

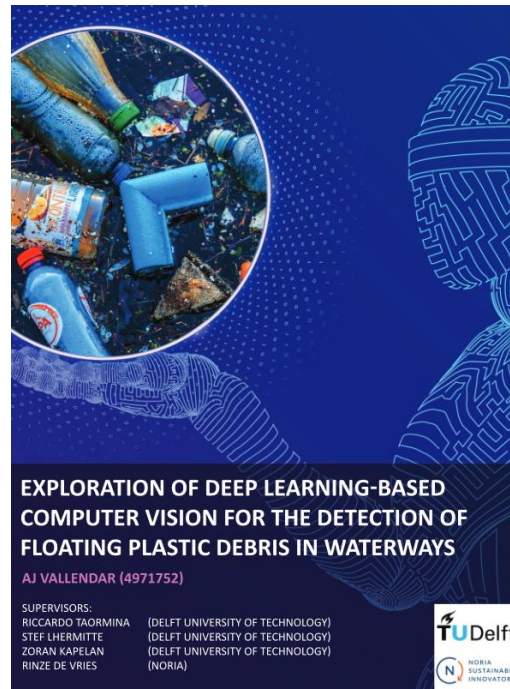
Ioanna Gkoutzamani

Ion Exchange as Pretreatment of Municipal Wastewater Effluent for Reverse Osmosis Desalination

Assessment of treatment performance and prediction of fouling potential on downstream reverse osmosis



TU Delft

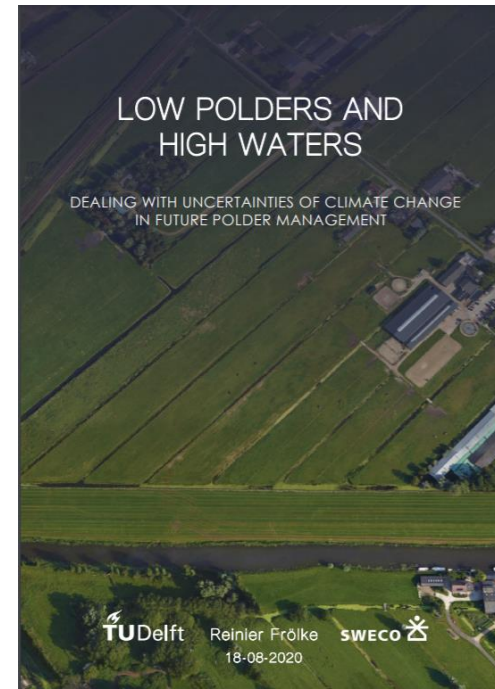


EXPLORATION OF DEEP LEARNING-BASED COMPUTER VISION FOR THE DETECTION OF FLOATING PLASTIC DEBRIS IN WATERWAYS

AJ VALLENDAR (4971752)

SUPERVISORS:
RICCARDO TAORMINA (DELFT UNIVERSITY OF TECHNOLOGY)
STEF LHERMITTE (DELFT UNIVERSITY OF TECHNOLOGY)
ZORAN KAPELAN (DELFT UNIVERSITY OF TECHNOLOGY)
RINZE DE VRIES (NORIA)

TU Delft
NORIA SUSTAINABLE INNOVATORS



LOW POLDERS AND HIGH WATERS

DEALING WITH UNCERTAINTIES OF CLIMATE CHANGE IN FUTURE POLDER MANAGEMENT

TU Delft Reinier Frölke SWECO
18-08-2020

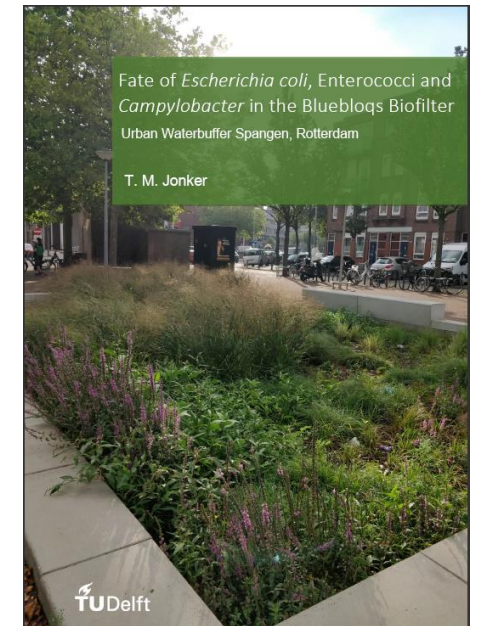
Phosphate Removal from Wastewater by Mineral Wool Filters

N.V. van Jaarsveld



TU Delft

Delft University of Technology



Fate of *Escherichia coli*, Enterococci and *Campylobacter* in the Bluebloqs Biofilter Urban Waterbuffer Spangen, Rotterdam

T. M. Jonker

TU Delft

- Orientation for a topic
- Doing the thesis work / Graduation guide
- Checklist / Procedures

■ Orientation for a topic

- ❑ Brightspace site:
- ❑ **NOT ONLY EE track!**



- ❑ This thesis market
& Meet the supervisor



- ❑ Ongoing and completed MSc research 1991-2021

Water Management Website: Checklists MSc

Completed MSc theses Water Resources/Hydrology: [Link](#)

Completed MSc theses Sanitary Engineering / Urban Drainage: [Link](#)

In choosing a topic, take into consideration that you must like it, but also that a MSc thesis is important to show to your future employers, and as the perfect way to demonstrate (all) your skills.

■ Doing the thesis work: at company?

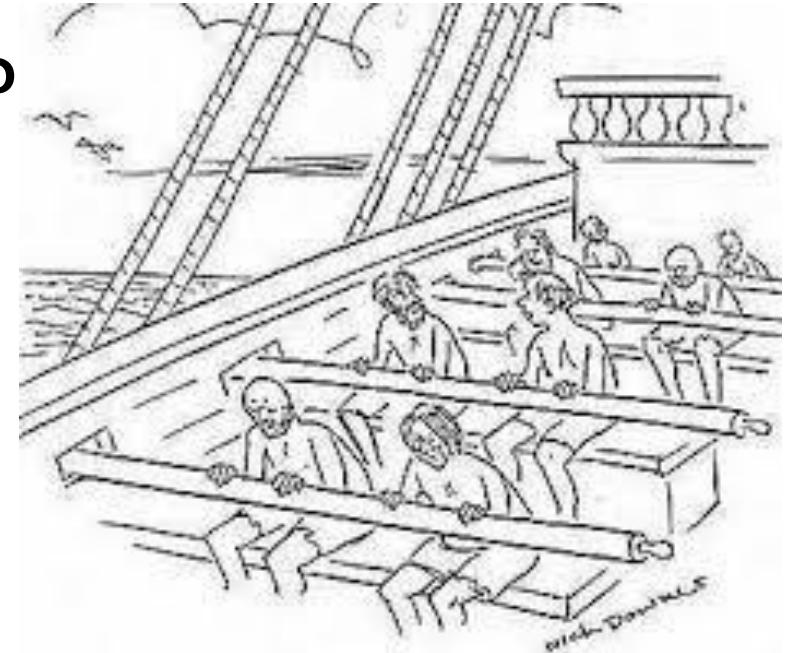
Highlights:

Thesis with a host organization

TU Delft website “student portal > education > forms master”
See “conditions for graduation at a company”

- Combined contract company / TU Delft
- Contract manager TU Delft signs

<https://www.tudelft.nl/en/student/ceg-student-portal/education/master/forms-master>



Are you in their internship program as well ?

1. The student offers the TUD graduation agreement to the company. This agreement is compliant with the respective laws and regulations. If the company accepts the agreement, all parties can proceed with filling in the form. If the company doesn't accept the TUD graduation agreement, the student cannot proceed with his/her graduation at this company.
2. Company and thesis supervisor of TU Delft agree with the contents of the thesis agreement.
3. Student and company supervisor fill in and sign the graduation agreement
4. The student will email the graduation agreement and the appendix (approved description of the graduation project) to Legal Service. Legal Service verifies if the agreement is the TU Delft standard graduation agreement and delivers it to the Dean. The Dean signs the graduation agreement;
5. The student receives the agreement, signed by the dean, by email. Student can start on the graduation assignment at the company.

■ Doing the thesis work: Starting

Highlights:

Start

Not a fixed date

Minimum 65 ECTS obtained

First the committee approves the proposal

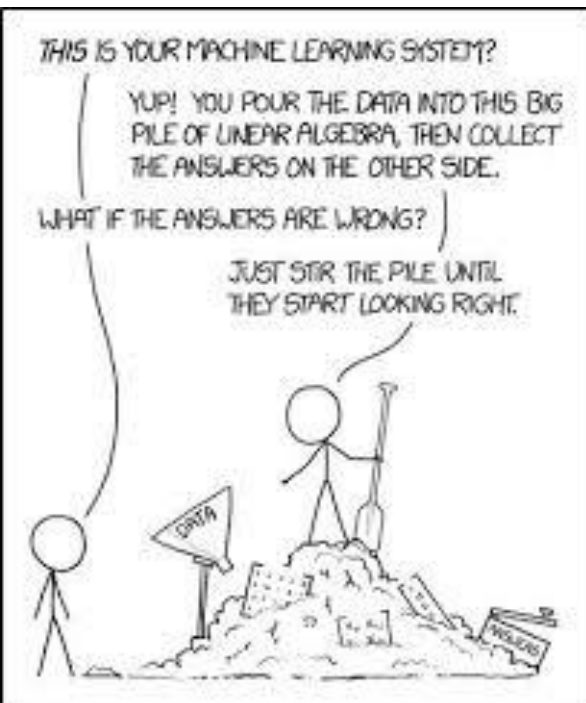
Duration:

40 EC = 28 weeks

!! The quality counts!!



Isaac Newton struggling to formulate his proposal



■ Doing the thesis work: committee composition

See *graduation guide Environmental Engineering Website Water Management*

Stu's Views © 2004 Stu All Rights Reserved www.STUS.com

Highlights:

Composition of the assessment committee:

Rules & Guidelines (R&G) Board of Examiners 2021-2022: Article 23

Preferably 3 (**minimally 2**) academic staff members TU Delft:

- 2 academic staff, including chair, from CEG
- The chairperson represents the track specialization of the MSc-candidate
- 2 different research groups/sections
- One additional (3th or higher) member can be a researcher / PhD student (under conditions)

Additional experts are allowed

Note: there are more conditions: ALWAYS discuss with graduation coordinator during formation of the committee!

<https://www.tudelft.nl/studenten/faculteiten/citg-studentenportal/onderwijs/onderwijsinformatie/educational-rules-and-regulations>



External (to the chair) committee members:

Example WM:

Gezondheidstechniek			Waterhuishouding	
Drinking water	Waste water	Urban water engineering	Hydrology	Water resources engineering
Luuk Rietveld	Jules van Lier	Zoran Kapelan	Miriam Coenders	Nick van de Giesen
Bas Heijman	Merle de Kreuk	Lisa Scholten	Thom Boogaard	Rolf Hut
Boris van Breukelen	Ralph Lindeboom	Jeroen Langeveld	Mark Bakker	Gerrit Schoups
Doris van Halem	Henri Spanjers	Dhruv Mehta	Wim Bastiaanssen	Erik Mostert
Jan Peter vd Hoek	Michele Laurenzi	Riccardo Toarmina	Markus Hrachowitz	Olivier Hoes
Gertjan Medema			Ruud van der Ent	Edo Abraham
Kim Lompe			Wim Luxemburg	Maurits Ertsen
Mirjam Blokker			Martin Bloemendal	Martine Rutten
			Remko Uijlenhoet	Marie-Claire ten Veldhuis
			Jan Willem Foppen	Ronald van Nooyen

■ Doing the thesis work: committee interaction

Highlights:

Meeting the assessment committee:

Start (kick-off), In between, Green light

!! Stay in touch with the committee !!



■ Doing the thesis work: help with the writing process

TU Delft's Writing Centre

www.tudelft.nl/writingcentre

- Writing a thesis can be very challenging. For students who find this extra challenging, a coaching session with the Writing Centre could be useful.
- In an online 45 minutes coaching session, the student will talk with a writing coach (a trained student from the TU) about the writing task and writing process, so that they can continue to write with more motivation, more confidence and more skills.
- A session at the Writing Center is free of charge and can be scheduled several times (max. 5) throughout the graduation process. So, not only in the writing phase, but also at the beginning (orientation phase) and at the end (revision phase).

Need some help with your Master Thesis?

Consult the Writing Centre!

- Where? Online via a conference call
- When? Every weekday. Check time slots on [the website](#).
- What? Talking with a writing coach about your writing (for free!)



Announcement: Bi-weekly MSc & PhD meetings

Odd week numbers: General Scientific Skills – Meeting

What: Bi-weekly meeting focussed on the general scientific skills such as scientific writing, problem analysis and concept development, research methodology, presenting and discussing results, critical thinking and science communication.

For whom: All MSc students working on their thesis and interested PhD students.

From whom: Guided by staff members. Contact person Martine Rutten.

When: Every Tuesday from 3:45pm – 5:00pm (during odd week numbers in Q1).

Where: Room 2.98: Second floor, CITG building.

How to join: Come to room 2.98 or join the teams meeting: <https://tinyurl.com/4wf9tbmz> (scan QR-code →)



Even week numbers: Topic Specific – Meeting

What: Bi-weekly meeting focussed on topic specific questions based on presentations and challenges from MSc students, PhD'ers and staff members (e.g. sharing the concepts of a hydrological model, a data analysis approach or a recently published paper). The four topics groups are:

1. Urban Water Systems and Management.
2. Drinking Water and Waste Water Quality.
3. Human-Influenced Water Systems, e.g. Agriculture & Energy.
4. Natural Water Systems, e.g. Hydrological Modelling & Soil Moisture.

For whom: All PhD and MSc students working at the same topic.

From whom: All PhD and MSc students working at the same topic.

When: Every Tuesday from 3:45pm – 5:00pm (during even week numbers in Q1).

Where: Room 2.98: Second floor, CITG building (optional online).

How to join: Come to room 2.98 or sign-up and find the meeting link in this form:

https://docs.google.com/spreadsheets/d/17MS20vXkvPb43G5j4qE_AaRKHQQ3rd3TAsxct53mb10/edit#gid=0 (scan QR-code →)



■ Doing the thesis work: Green Light & Assessment

Highlights:

Completing

Green light meeting: 20 working days before defence, CIE/AES-3
grade >6 doable

Finish / submit everything 5 days before defence

Defence => Thesis assessment => Diploma

Grading (check grading sheet at Student Portal > ... > Forms Master)

Scientific approach (25%)

Quality of result (25%)

Behavioral skills, such as independence, initiative and communication (20%)

Quality of written presentation (15%)

Quality of oral presentation and defense (15%)

<https://www.tudelft.nl/en/student/ceg-student-portal/education/master/forms-master>



■ Checklist / Procedures

*See checklist graduation & graduation guide
Environmental Engineering
at website Water Management*

Highlights:

[SPA Forms:](#)

Website www.tudelft.nl, student portal, education, master, forms master, go to AES or Civil Engineering

CIE/AES 0: Procedure Graduation (for the Faculty)

CIE/AES 1: Application start MSc [[>65EC](#), => SPA-Citg.tudelft.nl]

CIE/AES 2: Form Master Examination Programme: your list of courses [[replaced by MyStudyPlanning cohort 2020>](#)]

CIE/AES 2a: Changes to CIE-2 [[replaced by MyStudyPlanning cohort 2020>](#)]

CIE/AES 2b: for the MSP cohorts (2020>): composition graduation committee [[@start Thesis](#), sign => [Graduation Coordinator](#)]

CIE/AES 3: Application Form MSc degree [[@Green light](#), => SPA-Citg.tudelft.nl]

<https://www.tudelft.nl/en/student/ceg-student-portal/education/master/forms-master>



■ Procedures

*See checklist graduation & graduation guide
Environmental Engineering
at website Water Management*

Highlights:

- Prepare a A4 size document for the WAM website (ongoing MSc research) => send to secretariat
- Participation in Colloquia



Now, on this slide, may I direct your attention to the flashy animation and cool transition effects... because I worked really, really hard on them.

■ Checklist / Procedures

*See checklist graduation & graduation guide
Environmental Engineering
at website Water Management*

Highlights:

Don't forget:

Upload thesis report to Central Library

Education Repository



■ Procedures

***See checklist graduation & graduation guide
Environmental Engineering
at website Water Management***

Highlights:

- Reserve a room for the defence
- Send announcements, billboards, secretariat, dispute
- My advise: Try out the defence presentation



Congratulations, don't forget to return the borrowed equipment, ...Congratulations, don't forget to return the borrowed equipment, ...Congratulations, don't forget to return the borrowed equipment

See all and more on: website Water Management

The screenshot shows the TU Delft website for the Water Management Master's program. The header includes the TU Delft logo and navigation links: Home, Research, Education, Staff, Vacancies, News & Agenda, and Contact. A breadcrumb trail reads: Civil Engineering and Geosciences > About the faculty > Departments > Water Management > Education > Master.

The main content area is titled "Master" and states: "In the Masters Civil Engineering the department organises two tracks:"

- [Water Management](#), with the specialisations Hydrology, Water resources engineering, and Urban water engineering
- [Environmental engineering](#), with the specialisations Environmental science and Environmental technology

Two images illustrate the tracks: "Water Management" (an aerial view of a water treatment plant) and "Environmental Engineering" (two students in a laboratory).

A sidebar on the left lists navigation options: Home, Research, Education, Bachelor, Master (selected), Available MSc projects Water Management, MSc research Water Resources, MSc research Sanitary Engineering / Urban Water Engineering, Fieldwork, MSc Thesis Water Management, Online Professional Education, Marc van Eekeren Reisfonds, Staff, Vacancies, News & Agenda, and Contact.

Below the main content are three blue boxes for MSc Thesis topics:

- MSc Thesis Water Management**: Available MSc projects
- MSc Thesis Water Resources**: Ongoing and completed MSc research
- MSc Thesis Sanitary Engineering**: Ongoing and completed MSc research

At the bottom, there are two more blue boxes: "Fieldwork" and "Procedures".



Have you tried under "**TU Delft Water**"

<https://www.tudelft.nl/en/ceg/about-faculty/departments/watermanagement>

& on website CEG Student Portal

The screenshot shows the TU Delft website's 'Forms Master' page. The header includes the TU Delft logo and navigation links for Home, Education, Services, Organisation, and COVID-19 updates. The breadcrumb trail reads: TU Delft Student portal > CEG | Student portal > Education > Master > Forms Master. A left sidebar contains a navigation menu with categories like Bachelor, Master, Starting your MSc at CEG, Master Introduction, My Study Planning, Applied Earth Sciences, Civil Engineering, Transport Infrastructure & Logistics, Construction Management and Engineering, HTE bridging programmes MSc, Graduating, Master coordinators, Annotations, and Education information. The 'Forms Master' item is highlighted. The main content area is titled 'Forms Master' and contains an introductory paragraph: 'Here you find different forms such as application for exams. Read the form carefully before filling-in. Preferably to be completed digitally. Only fully completed and signed forms will be processed.' Below this, there are expandable sections for 'Applied Earth Sciences' and 'Civil Engineering'. The 'Civil Engineering' section is expanded, showing a list of links for various forms and guides, including 'CIE-0 Procedure Graduation', 'CIE-1 Application Start MSc', 'CIE-2 Form master examination programme', 'CIE-2a Form for changes in master examination programme', 'CIE-3 Application form MSc degree', 'CIE-2 CoMeM Form master examination programme', 'Information on update of the MSc thesis grading guide & sheet for AES & CIE', 'MSc thesis grading sheet (Excel, version September 2021)', 'MSc grading guide (print version, pdf, version September 2021)', and 'Old grading guide and old grading sheet'. There are also expandable sections for 'Transport, Infrastructure & Logistics' and 'Construction, Management and Engineering (CME)'. At the bottom, there are sections for 'General forms' (with links for 'Other forms', 'Procedure handing in a graduation agreement', 'Graduation Agreement at a company', 'Conditions for graduation at a company', and 'Manual plagiarism check for lecturers') and 'Annotation forms'.

TU Delft Student portal > CEG | Student portal > Education > Master > Forms Master

Forms Master

Here you find different forms such as application for exams. Read the form carefully before filling-in. Preferably to be completed digitally. Only fully completed and signed forms will be processed.

- + **Applied Earth Sciences**
- **Civil Engineering**
 - [CIE-0 Procedure Graduation](#)
 - [CIE-1 Application Start MSc \(aanvang afstuderen\)](#)
 - [CIE-2 Form master examination programme](#) (Some departments use an adapted version of this standard form. Please check first whether an adapted form is being used for your MSc track.)
 - [CIE-2a Form for changes in master examination programme /Assessment Committee](#)
 - [CIE-3 Application form MSc degree \(aanvraag MSc examen\)](#)
 - [CIE-2 CoMeM Form master examination programme](#)
 - [Information on update of the MSc thesis grading guide & sheet for AES & CIE](#) (version September 2021): includes information on transition for students who started their MSc thesis before September 2021.
 - [MSc thesis grading sheet \(Excel, version September 2021\)](#): to be used by the assessment committee. Includes the grading guide, a brief version of the grading guide, a description of the (sub-)criteria, and an example grading sheet
 - [MSc grading guide \(print version, pdf, version September 2021\)](#): includes the grading guide, a brief version of the grading guide, a description of the (sub-)criteria, and an example grading sheet
 - [Old grading guide](#) and [old grading sheet](#) (pre September 2021): They can only be used for projects that started before 30 August 2021 (before Q1) and that have their final presentation before 1 January 2022:
 1. Students who have their final presentation before 30 August 2021 use the old grading guide & grading sheet.
 2. Students who started their MSc thesis project on 30 August 2021 or later (in Q1), have to use the new grading guide & grading sheet.
 3. Students who started their MSc thesis project before 30 August 2021 and have their final presentation before 1 January 2022, make a choice with their assessment committee on which version to use. Standard is the old version.
- + **Transport, Infrastructure & Logistics**
- + **Construction, Management and Engineering (CME)**

General forms

- [Other forms](#) (double degree, honours programme, etc.)
- [Procedure handing in a graduation agreement](#)
- [Graduation Agreement at a company](#)
- [Conditions for graduation at a company](#)
- [Manual plagiarism check for lecturers](#)

- + **Annotation forms**

<https://www.tudelft.nl/en/student/ceg-student-portal/education/master/forms-master>

& on Educational Rules and Regulations

Educational Rules and Reguliati × +

← → ↻ https://www.tudelft.nl/en/student/ceg-student-portal/education/education-information/educational-rules-and-regulation 80% ☆

TU Delft Home Education Services Organisation COVID-19 updates NL EN

TU Delft Student portal > CEG | Student portal > Education > Education information > Educational Rules and Regulations

Educational Rules and Regulations

[Bachelor](#)

[Master](#)

[Education information](#)

[Honours Programme CEG](#)

[Academic attitude](#)

[Study Abroad](#)

Educational Rules and Regulations

[Study Progress](#)

[Regulations archive BSc](#)

Bachelor 2021-2022

BSc Civil Engineering	OER	RRvE
BSc Applied Earth Sciences	TER	R&G

Master 2021-2022

MSc Civil Engineering	TER	R&G
MSc Applied Earth Sciences	TER	R&G
MSc Transport, Infrastructure and Logistics	TER	R&G
4TU MSc Construction, Management and Engineering	TER	R&G

Additional Education Regulations

For other regulations, such as the student charter, we refer you to the [general education regulation page](#) of TU Delft.

Archive

[Regulations archive BSc](#)
[Regulations archive MSc](#)

Belonging to Article 13 of the Model Rules and Guidelines of the Board of Examiners (RRvE)

[Rules of Procedures for](#)

<https://www.tudelft.nl/en/student/ceg-student-portal/education/education-information/educational-rules-and-regulations>